

Listing of Claims:

Please amend claims 1, 3, 7, 9, 14, 17, 21, 27, 30, 34 and 36. This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A method for preparing organoclays comprising the steps of:

(a) dispersing a clay in an aqueous solution comprising a polymeric hydrotrope, wherein the average molecular weight of the polymeric hydrotrope is 5,000 or less;

(b) adsorbing sub-monomolecular layer of the polymeric hydrotrope on the clay; and

(c) adsorbing an HLB modifying cationic surfactant on the clay.

2. (Original) The method of Claim 1 wherein the polymeric hydrotrope is a water soluble polymer selected from the group consisting of polyvinyl alcohol, polyvinylpyrrolidone, polyethylene glycol, polypropylene glycol, polybutylene glycol, methoxypolyethylene glycol, dimethoxypolyethylene glycol, polyethylene glycol derivatives, copolymers of polyethylene glycol and polypropylene glycol, and copolymers of polyethylene glycol, polybutylene glycol and combinations thereof.

3. (Currently Amended) The method of Claim 1 wherein the polymeric hydrotrope is a water soluble polymer comprising a polyethylene glycol derivative selected from the group consisting of polyethylene glycol acrylate, polyethylene glycol diacrylate, polyethylene glycol methyl ether acrylate, polyethylene glycol methacrylate, polyethylene glycol dimethacrylate, polyethylene glycol methyl ether methacrylate, polyethylene glycol methyl ether epoxide, polyethylene glycol diglycidyl ether, polyethylene glycol phenyl ether acrylate, polyethylene glycol bisphenol A diglycidyl ether, polyethylene glycol dibenzoate, polyethylene

glycol bis(3-aminopropyl ether), polyethylene glycol butyl ether, polyethylene glycol dicarboxymethyl ether, and polyethylene glycol divinyl ether.

4. (Original) The method of Claim 1, wherein the polymeric hydrotrope is a polymer having limited water solubility selected from the group consisting of polyethylene glycol-*block*-polypropylene glycol-*block*-polyethylene glycol, polyethylene glycol-*ran*-polypropylene glycol, polyethylene glycol-*ran*-polypropylene glycol monobutyl ether, polypropylene glycol-*block*-polyethylene glycol-*block*-polypropylene glycol, polypropylene glycol monobutyl ether, polytetrahydrofuran, polytetrahydrofuran bis(3-aminopropyl), polyethylene-*block*-polyethylene glycol, polypropylene glycol, and combinations thereof.

5. (Original) The method of Claim 1 wherein the polymeric hydrotrope is adsorbed onto the clay prior to adsorbing the HLB modifying surfactant on the surface of the clay.

6. (Original) The method of Claim 1 wherein the clay is exposed to a solution containing both the polymeric hydrotrope and the HLB modifying surfactant, such that adsorption of the surfactant to the clay and adsorption of the hydrotrope on the clay occur substantially simultaneously.

7. (Currently Amended) The method of Claim 1 wherein the HLB modifying surfactant is selected from the group consisting of ~~surfactants of the~~ amine salt~~salt-type~~, phosphonium salt~~salt-type~~, and sulfonium salt~~salt-type~~.

8. (Original) The method of Claim 1 wherein the HLB modifying surfactant is a quaternary ammonium ion.

9. (Currently Amended) The method of Claim 1 wherein the organoclay has a polymeric hydrotrope loading of about 15 weight percent or less than about 15 weight percent.

10. (Original) The method of Claim 1 further comprising the steps of drying the organoclay and blending the dried organoclay with a swelling agent selected from natural and synthetic waxes.

11. (Original) The method of Claim 10 wherein the amount of swelling agent blended with the dried organoclay is between about 10 and about 30 weight percent relative to the weight of the organoclay.

12. (Original) The method of Claim 10 wherein the swelling agent is a natural wax selected from the group consisting of paraffin, microcrystalline montan, and vegetable waxes.

13. (Original) The method of Claim 10 wherein the swelling agent is a synthetic wax selected from the group consisting of Fisher-Tropsch, polyethylene, polypropylene, ethylene/propylene copolymers, polymethylene, chemically modified waxes, polymerized alpha-olefins, and combinations thereof.

14. (Currently Amended) A method for preparing organoclays comprising:

(a) dispersing a clay in an aqueous solution comprising a polymeric hydrotrope, wherein the average molecular weight of the polymeric hydrotrope is 5,000 or less;

(b) adsorbing from about 0.1 to about 15 percent by weight, relative to the weight of the clay, of the polymeric hydrotrope on the clay; and

(c) adsorbing a HLB modifying cationic surfactant on the clay.

15. (Original) The method of Claim 14 wherein the polymeric hydrotrope is adsorbed in an amount between about 1 and about 10 percent by weight, relative to the weight of the clay.

16. (Original) The method of Claim 14 wherein the polymeric hydrotrope is a water soluble polymer selected from the group consisting of polyvinyl alcohol, polyvinylpyrrolidone, polyethylene glycol, polypropylene glycol, polybutylene glycol, methoxypolyethylene glycol, dimethoxypolyethylene glycol, polyethylene glycol derivatives, copolymers of polyethylene glycol and polypropylene glycol, and copolymers of polyethylene glycol, polybutylene glycol and combinations thereof.

17. (Currently Amended) The method of Claim 14 wherein the polymeric hydrotrope is a water soluble polymer comprising a polyethylene glycol derivative selected from the group consisting of polyethylene glycol acrylate, polyethylene glycol diacrylate, polyethylene glycol methyl ether acrylate, polyethylene glycol methacrylate, polyethylene glycol dimethacrylate, polyethylene glycol methyl ether methacrylate, polyethylene glycol methyl ether epoxide, polyethylene glycol diglycidyl ether, polyethylene glycol phenyl ether acrylate, polyethylene glycol bisphenol A diglycidyl ether, polyethylene glycol dibenzoate, polyethylene glycol bis(3-aminopropyl ether), polyethylene glycol butyl ether, polyethylene glycol dicarboxymethyl ether, and polyethylene glycol divinyl ether.

18. (Original) The method of Claim 14 wherein the polymeric hydrotrope is a polymer having limited water solubility selected from the group consisting of polyethylene glycol-*block*-polypropylene glycol-*block*-polyethylene glycol, polyethylene glycol-*ran*-polypropylene glycol, polyethylene glycol-*ran*-polypropylene glycol monobutyl ether, polypropylene glycol-*block*-polyethylene glycol-*block*-polypropylene glycol, polypropylene glycol monobutyl ether, polytetrahydrofuran, polytetrahydrofuran bis(3-aminopropyl), polyethylene-*block*-polyethylene glycol, polypropylene glycol, and combinations thereof.

19. (Original) The method of Claim 14 wherein the polymeric hydrotrope is adsorbed onto the clay prior to adsorbing the HLB modifying surfactant on the surface of the clay.

20. (Original) The method of Claim 14 wherein the clay is exposed to a solution containing both the polymeric hydrotrope and the HLB modifying surfactant, such that adsorption of the surfactant to the clay and adsorption of the hydrotrope on the clay occur substantially simultaneously.

21. (Currently Amended) The method of Claim 14 wherein the HLB modifying surfactant is selected from the group consisting of ~~surfactants of the~~ amine salt~~salt-type~~, phosphonium salt~~salt-type~~, and sulfonium salt~~salt-type~~.

22. (Original) The method of Claim 14 wherein the HLB modifying surfactant is a quaternary ammonium ion.

23. (Original) The method of Claim 14 further comprising the steps of drying the organoclay and blending the dried organoclay with a swelling agent selected from natural and synthetic waxes.

24. (Original) The method of Claim 23 wherein the amount of swelling agent blended with the dried organoclay is between about 10 and about 30 weight percent relative to the weight of the clay.

25. (Original) The method of Claim 23 wherein the swelling agent is a natural wax selected from the group consisting of paraffin, microcrystalline montan, and vegetable waxes.

26. (Original) The method of Claim 23 wherein the swelling agent is a synthetic wax selected from the group consisting of Fisher-Tropsch, polyethylene, polypropylene, ethylene/propylene copolymers, polymethylene, chemically modified waxes, polymerized alpha-olefins, and combinations thereof.

27. (Currently Amended) A method for preparing organoclays comprising:

(a) mixing a clay with a polymeric hydrotrope having an average molecular weight of 5000 or less and an HLB modifying cationic surfactant;

(b) adsorbing from about 0.1 to about 15 percent by weight, relative to the weight of the clay, of the polymeric hydrotrope on the clay; and

(c) adsorbing the HLB modifying cationic surfactant on the clay.

28. (Original) The method of Claim 27 wherein the polymeric hydrotrope is adsorbed in an amount between about 1 and about 10 percent by weight, relative to the weight of the clay.

29. (Original) The method of Claim 27 wherein the polymeric hydrotrope is a water soluble polymer selected from the group consisting of polyvinyl alcohol, polyvinylpyrrolidone, polyethylene glycol, polypropylene glycol, polybutylene glycol, methoxypolyethylene glycol, dimethoxypolyethylene glycol, polyethylene glycol derivatives, copolymers of polyethylene glycol and polypropylene glycol, and copolymers of polyethylene glycol, polybutylene glycol and combinations thereof.

30. (Currently Amended) The method of Claim 27 wherein the polymeric hydrotrope is a water soluble polymer comprising a polyethylene glycol derivative selected from the group consisting of polyethylene glycol acrylate, polyethylene glycol diacrylate, polyethylene glycol methyl ether acrylate, polyethylene glycol methacrylate, polyethylene glycol dimethacrylate, polyethylene glycol methyl ether methacrylate, polyethylene glycol methyl ether epoxide, polyethylene glycol diglycidyl ether, polyethylene glycol phenyl ether acrylate, polyethylene glycol bisphenol A diglycidyl ether, polyethylene glycol dibenzoate, polyethylene glycol bis(3-aminopropyl ether), polyethylene glycol butyl ether, polyethylene glycol dicarboxymethyl ether, and polyethylene glycol divinyl ether.

31. (Original) The method of Claim 27 wherein the polymeric hydrotrope is a polymer having limited water solubility selected from the group consisting of polyethylene

glycol-*block*-polypropylene glycol-*block*-polyethylene glycol, polyethylene glycol-*ran*-polypropylene glycol, polyethylene glycol-*ran*-polypropylene glycol monobutyl ether, polypropylene glycol-*block*-polyethylene glycol-*block*-polypropylene glycol, polypropylene glycol monobutyl ether, polytetrahydrofuran, polytetrahydrofuran bis(3-aminopropyl), polyethylene-*block*-polyethylene glycol, polypropylene glycol, and combinations thereof.

32. (Original) The method of Claim 27 wherein the polymeric hydrotrope is adsorbed onto the clay prior to adsorbing the HLB modifying surfactant on the surface of the clay.

33. (Original) The method of Claim 27 wherein the clay is exposed to a mixture containing both the polymeric hydrotrope and the HLB modifying surfactant, such that adsorption of the surfactant to the clay and adsorption of the hydrotrope on the clay occur substantially simultaneously.

34. (Currently Amended) The method of Claim 27 wherein the HLB modifying surfactant is selected from the group consisting of ~~surfactants of the~~ amine salt~~salt-type~~, phosphonium salt~~salt-type~~, and sulfonium salt~~salt-type~~.

35. (Original) The method of Claim 27 wherein the HLB modifying surfactant is a quaternary ammonium ion.

36. (Currently Amended) The method of Claim ~~27~~³⁷ further comprising the step of blending the organoclay with a swelling agent selected from natural and synthetic waxes.

37. (Original) The method of Claim 36 wherein the amount of swelling agent blended with the organoclay is between about 10 and about 30 weight percent relative to the weight of the clay.

38. (Original) The method of Claim 36 wherein the swelling agent is a natural wax selected from the group consisting of paraffin, microcrystalline montan, and vegetable waxes.

39. (Original) The method of Claim 36 wherein the swelling agent is a synthetic wax selected from the group consisting of Fisher-Tropsch, polyethylene, polypropylene, ethylene/propylene copolymers, polymethylene, chemically modified waxes, polymerized alpha-olefins, and combinations thereof.